

# Designing new socio-economic imaginaries

Report by  
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# Motivation

The idea of Geocoin began to shape, when I was working with Chris Speed on an ESRC funded project 'After Money':

*"the research project explored potential use cases for money as software through public engagement activities including families and local organisations. The research represents a significant contribution to contemporary debates around the emergence of new forms of value exchange and offers tangible outcomes for local, economic and academic communities."* ([link](#))

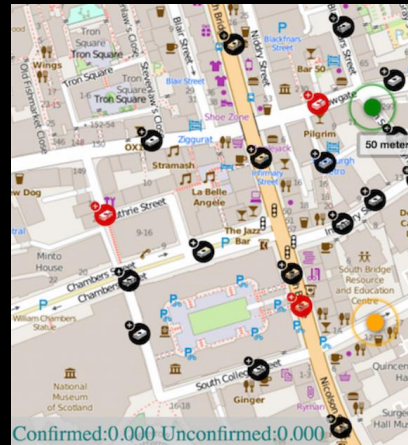
We wanted to develop a novel way to introduce cryptocurrencies to members of the public as well as local organisations.

Our first workshop was with a group of individuals at the Creative Technology Centre, the Royal Bank of Scotland, Edinburgh. RBS was also one of our industry partners on this project.

This work was then used in participatory design workshop in Nieuwmarkt area of Amsterdam.

Chris and I together developed two concepts that was the foundation of several works the centre for Design Informatics continued to develop.

- Geocoin
- Unfinished software



# What is Geocoin 1.0

Geocoin 1.0 was a mobile app. We associated the transparent stream of currency that runs through our streets, cities and networks and augmented it in the physical space using navigational technologies.

The app consisted of two parts:

- Geocoin app: Users could see the status of their digital wallet balance.
- Backend server: Initiating new wallets, running the transactions and movement of digital currency between different wallets. I developed this using Electrum (bitcoin based virtual money platform) and Open street maps.

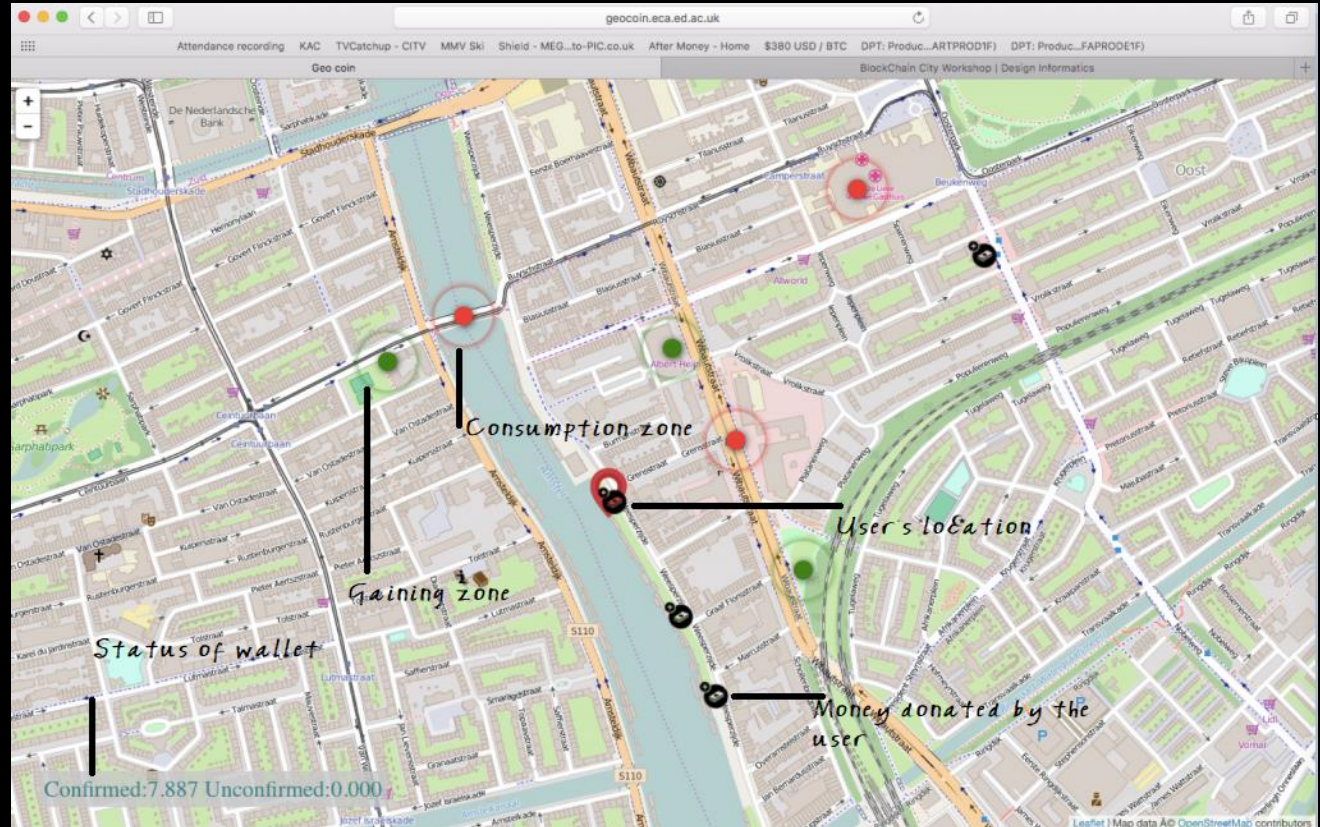


# Geecoin 1.0 Web app

Geecoin 1.0 was a web application.

Users could interact with the app and explore the potentials of virtual money by adding

- Gaining zones (Geofences where users automatically gain money when walking in these areas)
- Consumption zones. (Geofences where users loose money when walking in these areas)
- Drop virtual money around the city for different socio-political projects.



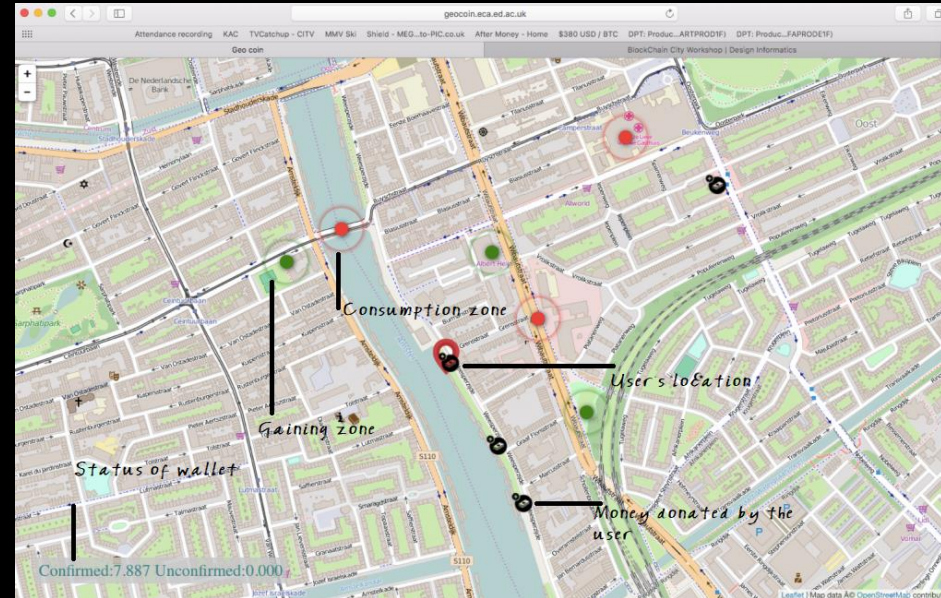
*We used this app in different workshops to co design new imaginaries for Blockchain technologies.*



# Design language of Geocoin 1.0

## Methods we used:

- We used ambiguity in information to intrigue the users to reflect and think about movements of money. For users' bitcoin wallet balance the app showed "confirmed" & "Unconfirmed" balances.
- Revealed some of the hidden sociomaterial aspect of digital money by associating digital wallets with geofenced money zones and virtual wallets.
- Used the design artefact as an "unfinished software" to explore and introduce smart contracts and crypto currencies to users.



*We used this app in different workshops to co design new imaginaries for Blockchain technologies.*

# Geocoin engagement

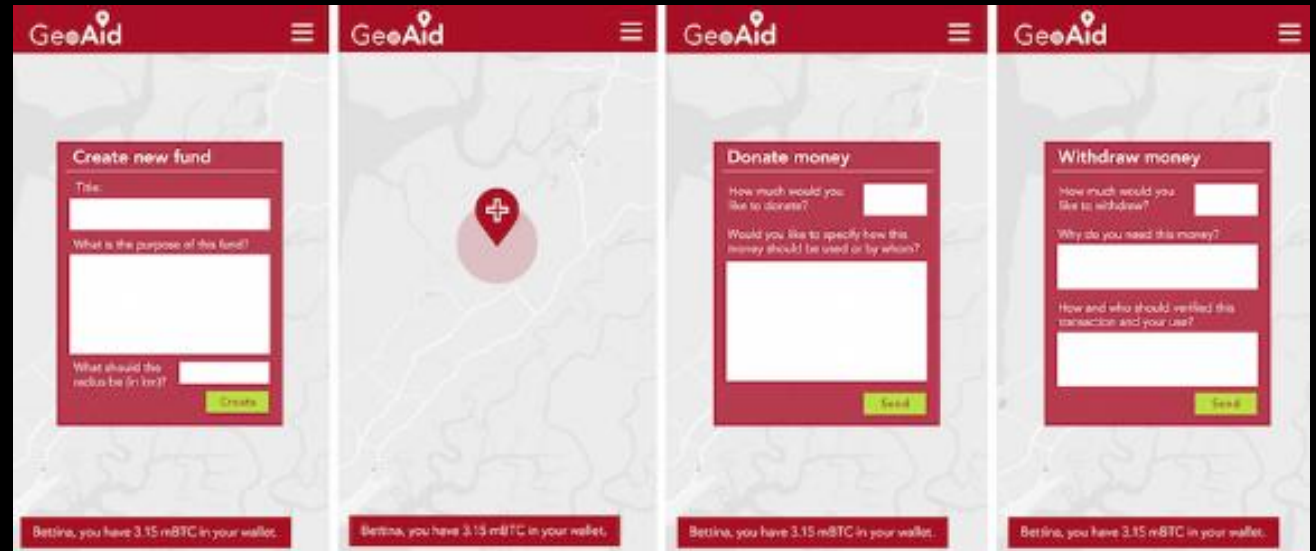
Geocoin app was used to explore different design imaginaries of smart contract and cryptocurrencies in 4 workshops with 69 participants over the course of 10 months.

One of the outcomes of these engagements was a work one our participants developed, turning the geocoin app into a humanitarian aid app.



# Geoaid

Geocoin's iteration developed through our participatory workshops by our participants. Workshops ran by the centre for design informatics.

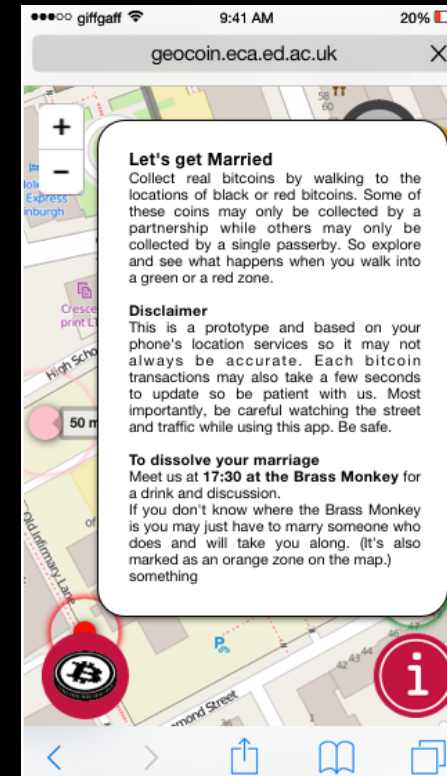


Public engagement



# Baby let's get married

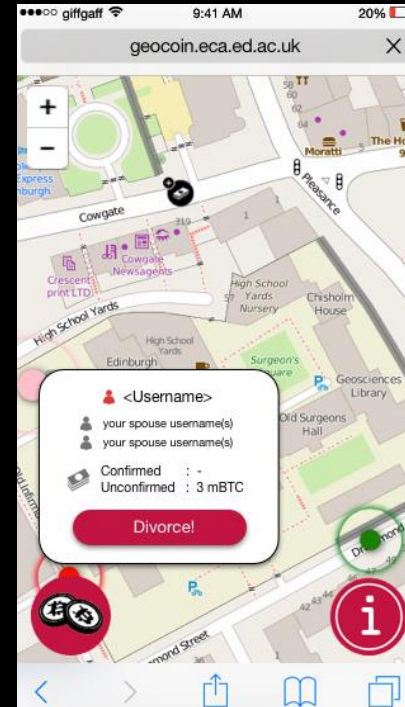
- This was a speculative and provocative design work that we developed based on Geocoin 1.0.
- Our aim was to situate cryptocurrencies in a strange situation to involve members of the public to engage with digital currencies and smart contracts using light-hearted humour.
- This work was exhibited as part of Edinburgh International festival in Edinburgh 2016.



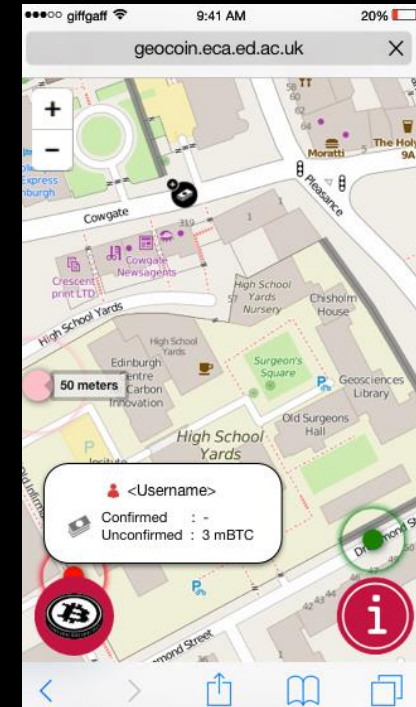
*I developed the app and Betinna Nissen produced the UI design.*

# Baby let's get divorced

- We added marriage zones around the city of Edinburgh. Single users could walk into these virtual offices, click on the “Let’s Get Married” button on the app. This results in:
  - Loud sound of cheer in the exhibition space and from participants mobile phones
  - This would add all interested individuals into a collective marriage with a group wallet that they could spend money collectively around the city (Speculative everything)
  - The smart contract would last for a 4 hours and automatically divorced individuals at the end of the period



Divorce interface



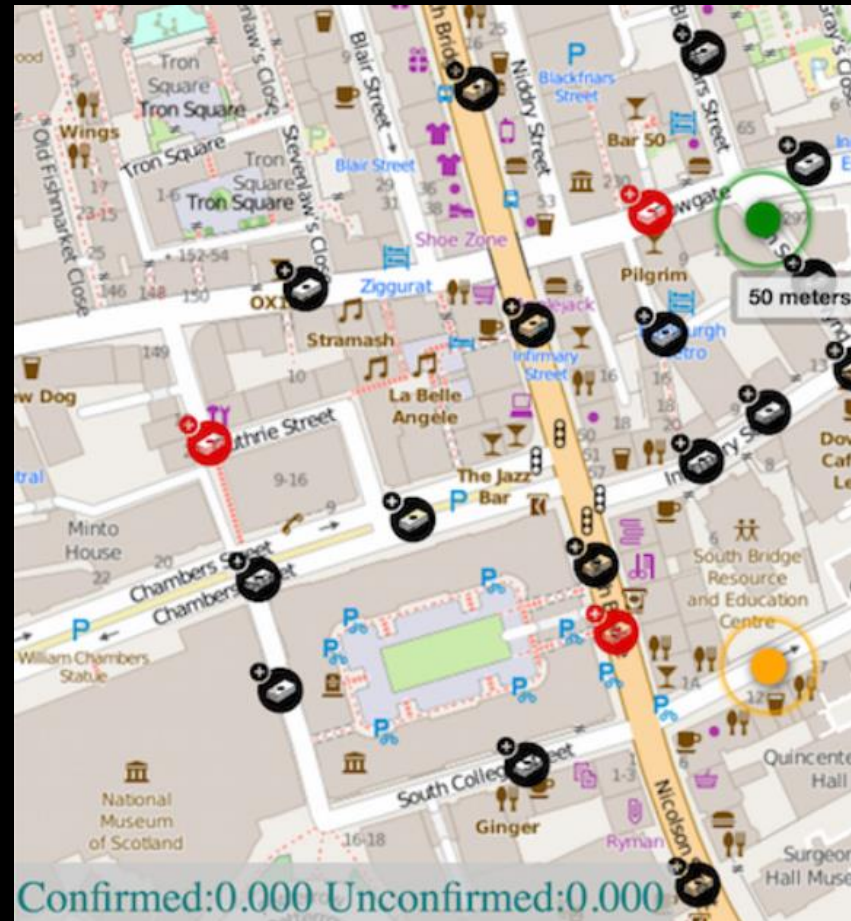
Single users' interface

# Beyond Geocoin 1.0

We developed a participatory approach to explore sociomaterial aspects of money. Contributing to debates around digital economy and smart contracts. Not only engaging researchers by members of the public through our exhibitions and workshops.

This was through developing a concept that we called “unfinished software”

Similar to prototype, but extending it to software design as a method to engage the audiences in shaping and designing the future of soft materials (Software). The aim of “unfinished software” is to introduce a technology to participants without a hidden design/agenda underpinning the prototype.



# Contributions to knowledge and community

Our work helped with developing several new projects through our workshops by our participants

- **Civic Blocks** – Participatory Budgeting with Bitcoin

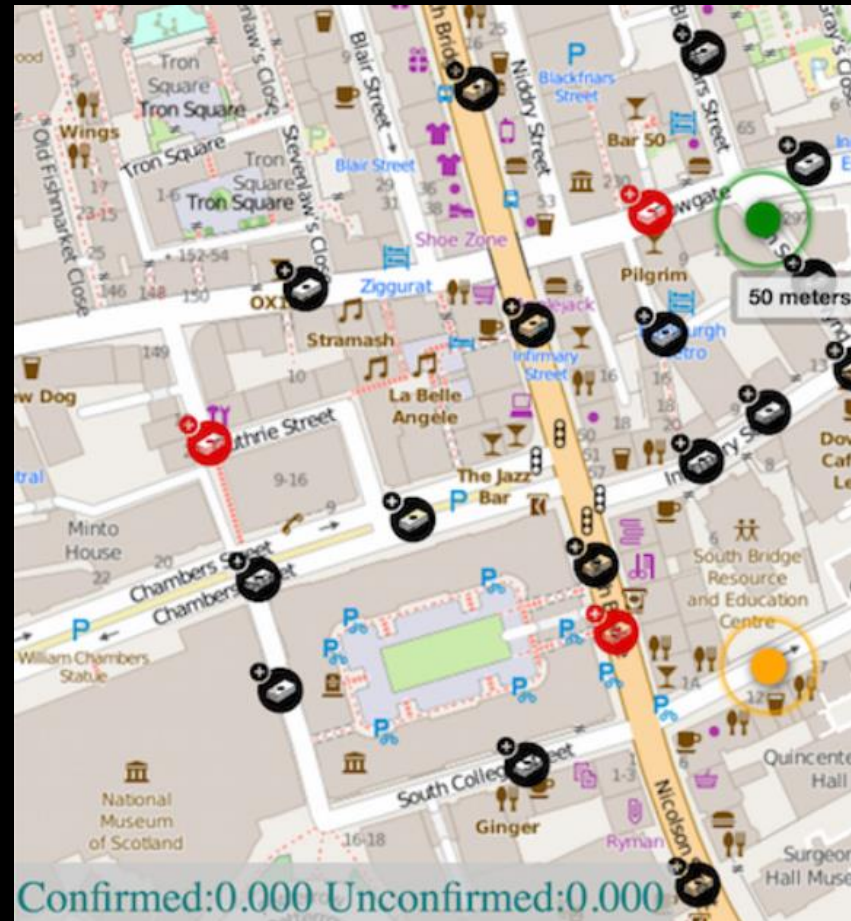
How can we use new technologies to create a more demo-cratic city?

- **GeoAid** - Distributing Humanitarian Aid Directly

Can blockchain technologies support the redistribution of humanitarian aid without the need for middlemen/organisations? How could you directly donate to a small village or individual farmer in need?

- **Handfastr** – Making Commitments Wherever You Are

if we could set and formalise our agreements and commitments, for a place and a time, to enable hyper-local economic zones with specific rules made by us, for us?





# Concept of civic blocks



As they enter the GPS coordinates of the pay balloon, Laura's wallet will be debited, and they now have a ticket to enter the cinema.



Having bought their ticket, Laura and Miguel are in the cinema and watching the trailers. Since she has a strong social media following, her account will be credited.



Opting to skip the trailers, Geoff joins the others to watch the main feature.



The three friends enjoy the movie (designated by the large blue circle).

# Contributions to knowledge and community

Based on what we learned from this project, we developed Finbook, an speculative design work to reveal aspects of the commodification of knowledge. We assigned microtransactions to chapters of our collective book 'Artists Re:Thinking The Blockchain'. Bringing to the fore our entanglements with market-led technologies & commodification of knowledge platforms and reveal their effects on individual authors.

## FINBOOK MANUAL

FinBook is an algorithmic contribution to this book that works in parallel to the edited collection of articles. At the end of each article there is a QR code that enables you to access a website that displays the economic performance of each article according to parameters established by the FinBook authors and programmers - see overleaf for details.



FinBook: literary content as digital commodity.

Rory Gianni, Hadi Mehrpouya, Dave Murray-Rust, Bettina Nissen, Shaune Oosthuizen, Chris Speed, Kate Symons

# Links

- Geocoin documentation ([link](#))
- Project link ([here](#))
- Link to Geocoin 1.0 that I developed ([link](#))